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Routine Use and Satisfaction of Measures for the Prevention of Ankle Sprain Injuries in Indoor Sports

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Routine Use and Satisfaction of Measures for the Prevention of Ankle Sprain Injuries in Indoor Sports

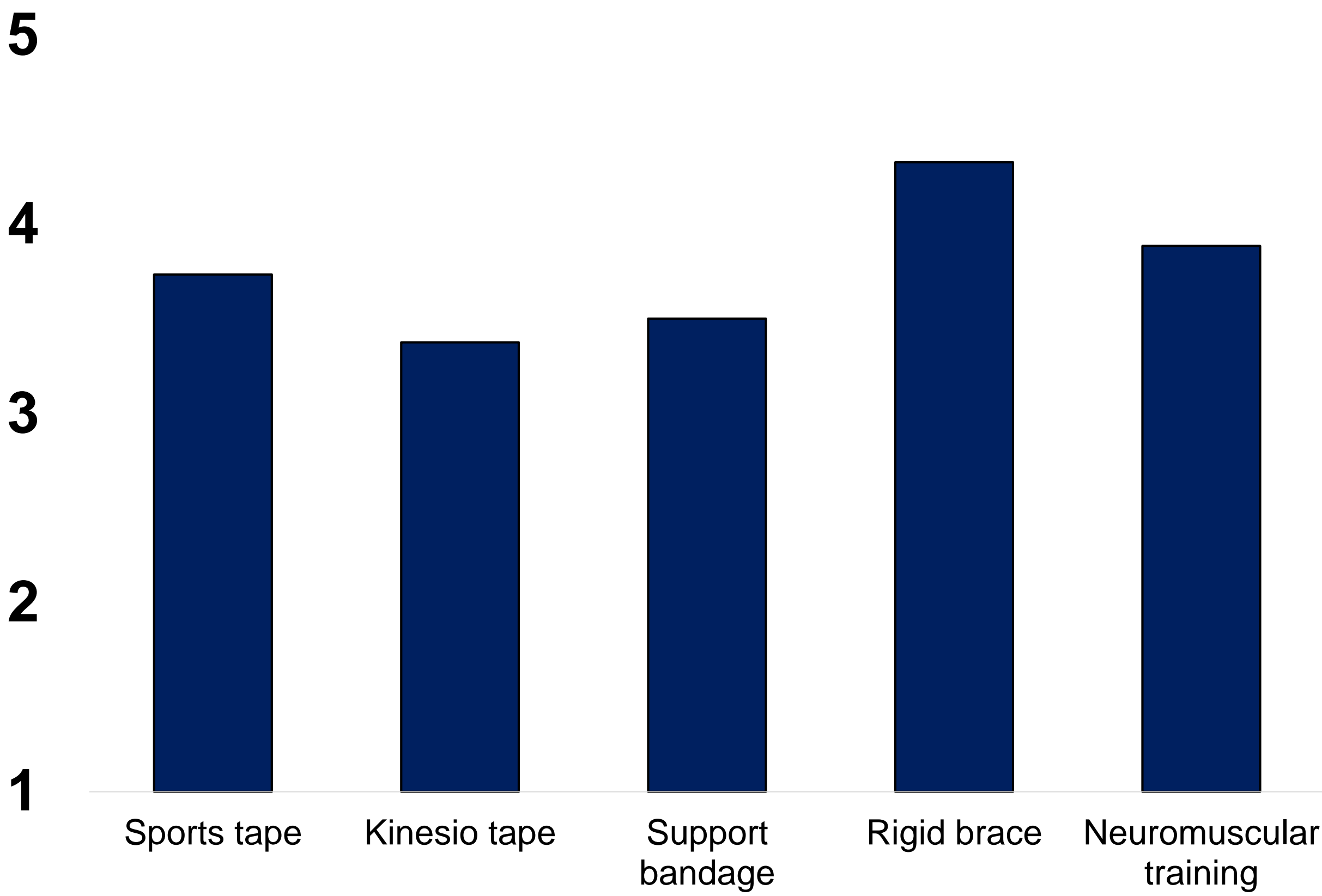
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INTRODUCTION

- Ankle sprain injuries account for up to 30% of all sport-related injuries^[1]
- 80-90% are of a lateral nature caused by a sudden excessive inversion of the foot^[2]
- Ankle sprains are extremely common in indoor sports^[1,3]
- Athletes with a previous ankle sprain are 4.9^[3] to 8.2^[4] times more likely to sustain another ankle sprain injury
- Current best practice prescribes a combined use of an external measure and neuromuscular training for 1-2 years^[5]

SATISFACTION



OBJECTIVES

To identify the use of, and satisfaction with, measures for preventing ankle sprain injuries in indoor sports

METHODS

- 398 Players with a recent ankle sprain
 - Handball, Basketball and Badminton
 - Elite/sub-elite level (league, 1st, 2nd, and 3rd division)
- Questionnaire regarding use of and satisfaction with preventive measures
 - Sports tape
 - Kinesio tape
 - Rigid brace
 - Support bandage
 - Neuromuscular training
- Level of satisfaction rated using a Likert scale
 - Differences analyzed using a Mixed-design analysis of variance



RESULTS

- **90.7%** of all players have used at least one preventive measure since their most recent ankle sprain
 - 77.6% have used sports tape
 - 14.3% have combined neuromuscular training with rigid bracing and/or sports tape
 - Rigid bracing was superior in adherence (56.1% continued use)
- Players were significantly more satisfied with:
 - Rigid bracing vs. any other preventive measure ($P < 0.001$)
 - Neuromuscular training vs. Kinesio tape ($P < 0.001$)
 - Neuromuscular training vs. support bandage ($P < 0.001$)
 - Sports tape vs. Kinesio tape ($P = 0.003$)
- **72.8%** with a very recent ankle sprain (≤ 3 months) had stopped using preventive measures
 - “I did not feel the need anymore”



CONCLUSIONS

- *Almost all players (90.7%) have used a measure to prevent ankle sprains*
- *Players were most satisfied with rigid braces*
- *Players do not follow current best practice*

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